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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/588,966	08/10/2006	Mitsunori Tanaka	1248-0889PUS1	3965

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EXAMINER
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MAPA, MICHAEL Y

ART UNIT	PAPER NUMBER
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4113

NOTIFICATION DATE	DELIVERY MODE
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08/11/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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<b>Office Action Summary</b>	<b>Application No.</b> 10/588,966	<b>Applicant(s)</b> TANAKA, MITSUNORI	
	<b>Examiner</b> Michael Mapa	<b>Art Unit</b> 4113	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 August 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>see continuation sheet</u> .                                  | 6) <input type="checkbox"/> Other: _____                          |

IDS FILED ON:

08/10/06

11/29/07

02/20/08

07/16/08

## **DETAILED ACTION**

### ***Information Disclosure Statement***

1. The information disclosure statement (IDS) submitted on 08/10/06, 11/29/07, 02/20/08 and 07/16/08 has been considered by the examiner.

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 3 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "closer" in claim 3 is a relative term which renders the claim indefinite. The term "closer to the center of a usable frequency" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. The claim language used in claim 3 wherein the claim states "closer to the center of a usable frequency" is indefinite because the applicant has not specified what is considered as closer to the center.

### ***Claim Rejections - 35 USC § 101***

3. 35 U.S.C. 101 reads as follows:

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Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 12 and 13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Regarding claim 12, the applicant has claimed a controlling program which does not provide tangibility and is directed towards non-statutory subject matter and is ineligible for patenting. Regarding claim 13, the examiner rejects claim 13 because it is dependent on claim 12 and although the claim language used of "a storage medium storing therein said wireless communications system controlling program" is tangible, the format used without any tangible components to the program makes claim 19 directed toward non-statutory subject matter. Appropriate correction is required. The examiner suggests incorporating claims 12 and 13 together to a single claim to make the claims statutory. For the purpose of the rejection stated below, the examiner will regards claim 12 and 13 as being incorporated into a single claim that is statutory.

### ***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 and 4-16 are rejected under 35 U.S.C. 102(b) as being anticipated by Hebeler et al. (US Patent 6304756 herein after referenced as Hebeler).

Regarding claim 1, Hebeler discloses a system and method for channel arbitration between handset and base station in a cordless telephone system wherein the handset and base station communicate over a predetermined frequency band which is broken up into a number of channels [Column 3, Lines 20-23] which reads on “A wireless communications system including a transmitting device and a receiving device each of which is capable of performing wireless communications on a plurality of communications channels.” Hebeler continues to disclose the system and method wherein the handset and base station determines which channels are free of interference [Figs. 2A & 2B, Column 3, Lines 61-62] which reads on claimed “inspection process.” Hebeler also continues to disclose choosing a subset to use for communication between the handset and the base station from all the available channels for communication found [Fig. 3, Column 4, Lines 26-34] which reads on claimed “the number of user-selectable communications channels which a user in general is able to select is less than the number of communications channels set at a time of an inspection process.”

Regarding claim 2, Hebeler discloses everything claimed as applied above (see claim 1.) In addition, Hebeler also discloses randomizing the available channels selected [Column 4, Lines 65–67 and Column 5, Lines 1-3] which reads on claimed “said user-selectable communications channels are randomly set at the end of the inspection process.”

Regarding claim 4, Hebeler discloses a system and method for channel arbitration between handset and base station in a cordless telephone system wherein the handset and base station communicate over a predetermined frequency band which is broken up into a number of channels [Column 3, Lines 20-23] which reads on “A wireless communications system including a transmitting device and a receiving device each of which is capable of performing wireless communications on a plurality of communications channels.” Hebeler also continues to disclose choosing a subset to use for communication between the handset and the base station from all the available channels for communication found [Fig. 3, Column 4, Lines 26-34] which reads on claimed “the number of usable communications channels is less than the number of settable communications channels in said transmitting device and/or receiving device.”

Regarding claim 5, Hebeler discloses everything claimed as applied above (see claim 4.) In addition, Hebeler discloses both handset and base station determining a subset from the available channels found wherein the handset only scans that subset for communication from the base station [Figs. 2A & 2B, Column 4, Lines 38-44] which reads on “channel limitation means for selecting the usable communications channels from the settable communications channels”

Regarding claim 6, Hebeler discloses everything claimed as applied above (see claim 5.) In addition, Hebeler continues to disclose both the handset and base station determining the subset from the available channels found [Figs. 2A & 2B, Column 4, Lines 38-44] which reads on claimed “each of said transmitting device and the receiving device includes said channel limitation means” Hebeler also discloses both base

station and handset using the channels chosen for the subset of available channels to initiate calls wherein the handset scans only those channels determined to be in the subset for communication from the base station [Figs. 2A & 2B, Column 5, Lines 53-55] which reads on claimed “and the channel limitation means of one of said transmitting device and the receiving device (i) determines at least one of said usable communications channels and (ii) wirelessly transmits information of said at least one of usable communications channels determined, to the channel limitation means of another one of said transmitting device and the receiving device, via a predetermined communications channel.”

Regarding claim 7, Hebeler discloses everything claimed as applied above (see claim 5.) In addition, Hebeler continues to disclose randomizing the available channels selected [Column 4, Lines 65–67 and Column 5, Lines 1-3] which reads on claimed “said channel limitation means randomly selects the usable communications channels from the settable communications channels.”

Regarding claim 8, Hebeler discloses everything claimed as applied above (see claim 5.) In addition, Hebeler continues to disclose having the channels assigned on a specific frequency [Column 6, Table 2] which reads on claimed “channels assigned on a frequency-by-frequency basis.” Hebeler also discloses only using the subset chosen from the available channels for communication and excludes the available channels not within the subset chosen [Column 4, Lines 38-45 and Column 5, Table 1] which reads on claimed “amongst channels assigned on a frequency-by-frequency basis, said channel limitation means excludes, from a choice of the usable communications



channels, a channel nearby the boundary of a usable frequency band in the wireless communications system.”

Regarding claims 9 and 10, Hebeler discloses everything claimed as applied above (see claim 1.) In addition, Hebeler continues to disclose the base station and handset to both have an RF transceiver (105 & 114) for communication via RF transmission [Fig. 1 and Column 3, Lines 30-32] which reads on claimed “A transmitting device for use in the wireless communications system” and claimed “A receiving device for use in the wireless communications system.”

Regarding claim 11, Hebeler discloses the method and system wherein both the handset and base station, having RF transceivers [Fig. 1 and Column 3, Lines 30-32] which read on claimed “a wireless communications system including a transmitting device and a receiving device each of which is capable of performing wireless communications on a plurality of communications channels”, selects the same subset for communication from the available channels [Column 4, Lines 38-45] which reads on claimed “selecting one or more usable communications channels from settable communications channels, in said transmitting device and/or receiving device.”

Regarding claims 12 and 13, Hebeler discloses everything claimed as applied above (see claim 5.) In addition, Hebeler continues to disclose the system of both the handset and base station to have a controller (112 & 102) that provides audio processing, protocol control as well as having a microcontroller and memory [Figure 1, Column 3, Lines 23-27] which reads on claimed “A storage medium storing therein said

wireless communications system controlling program wherein said program causes a computer to function as said channel limitation means.”

Regarding claim 14, Hebeler discloses everything claimed as applied above (see claim 5.) In addition, Hebeler continues to disclose the base station initiating a call using the subset of channels to ensure that the handset is listening to the channel on which the call is initiated [Column 7, Lines 5-7] which reads on claimed “remote instruction means for (i) determining at least one of the usable communications channels.” Hebeler further discloses the handset scanning only the channels determined to be in the subset of available channels which reads on claimed “and (ii) remotely indicating, to the channel limitation means, said at least one of communications channels determined.”

Regarding claims 15 and 16, Hebeler discloses everything claimed as applied above (see claim 4.) In addition, Hebeler continues to disclose the base station and handset to both have an RF transceiver (105 & 114) for communication via RF transmission [Fig. 1 and Column 3, Lines 30-32] which reads on claimed “A transmitting device for use in the wireless communications system” and claimed “A receiving device for use in the wireless communications system.”

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hebeler et al. (US Patent 6304756 herein after referenced as Hebeler) in view of Pelchat (US Patent 4233576 herein after referenced as Pelchat).

Regarding claim 3, Hebeler discloses everything claimed as applied above (see claim 1.) In addition, Hebeler continues to disclose the handset and base station determining a subset from the available channels for use in communications [Figures 2A & 2B; Column 4, Lines 38-44 of Hebeler] which reads on claimed “user-selectable communications channels” and continues to disclose each channel being assigned to a specific frequency [Column 2, Table 2 of Hebeler] which reads on claimed “channels assigned on a frequency-by-frequency basis”. Hebeler fails to disclose the claimed limitation of “said user-selectable communications channels are channels successively selected from channels assigned on a frequency-by-frequency basis, in order from a channel closer to the center of a usable frequency band in said wireless communications system.” However, the examiner maintains that it was well known in the art at the time the invention was made for the system and method as taught by Hebeler to incorporate the method of using signals closer to the center of the frequency band as taught by Pelchat.

Pelchat discloses a method wherein the signals should preferably be tuned to signals close to the center of the band in order to produce best overall cross talk cancellation for all channels concerned [Column 8, Lines 30-33 of Pelchat]

Therefore it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the method as taught by Pelchat of using the signals close to the center of the frequency band into the system and method of Hebel for the purpose of producing best overall cross talk cancellation for all channels concerned [Column 8, Lines 30-33 of Pelchat] and which reads on claimed "said user-selectable communications channels are channels successively selected from channels assigned on a frequency-by-frequency basis, in order from a channel closer to the center of a usable frequency band in said wireless communications system."

### ***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Mapa whose telephone number is (571)270-5540. The examiner can normally be reached on MONDAY TO THURSDAY 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jefferey Harold can be reached on (571)272-7519. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Mapa/

Examiner, Art Unit 4113

/Jefferey F Harold/

Supervisory Patent Examiner, Art Unit 4113